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August 7, 2006

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Presentation, CS Docket No. 97-80

Dear Ms. Dortch:

On March 23 and 24 of this year, CEA filed *ex parte* comments in this Docket, providing documentation for examples of failures of cable industry system operators and their vendors to support CableCARD-reliant competitive devices.[1] These filings demonstrated that systematic failures and omissions in training, implementation, and support had been responsible for inadequate support of such devices, and that these deficiencies would be unlikely to exist or persist in a regime of common reliance, in which cable operators themselves were obliged to rely on CableCARDS in a widespread and systematic way.

On June 29, the National Cable & Telecommunications Association (NCTA) filed a rejoinder taking issue with the conclusions and some of the specific examples provided in the March 23 CEA *ex parte*. The NCTA letter proceeds from a number of premises that are factually or conceptually incorrect.[2] The purpose of this CEA response is to enhance the Commission's understanding of why CE companies have concluded that "common reliance" represents the most effective way to ensure consumers can reliably access cable services

[1] *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, CS Docket No. 97-80, *Ex Parte* filing of CEA Re Notice of *ExParte* Presentation (Mar. 23, 2006); *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, CS Docket No. 97-80, *Ex Parte* filing of CEA Re Notice of *ExParte* Presentation (Mar. 24, 2006).

[2] The incorrect premises are: (1) that it has been consumer electronics devices, rather than MSO and vendor systems, that have suffered from "minimal testing;" (2) that the implementation by a device manufacturer of a "firmware upgrade," or the more successful operation of a device after such an upgrade, points to a pre-existing flaw in a device rather than to the inadequacy of an MSO or vendor system; (3) that the practice of cable operators' field technicians in experimenting with a handful of CableCARDS in consumers' homes points to a problem with devices -- rather than to flaws in the CableCARDS themselves, and the lack of MSO recordkeeping as to their own upgrade status; (4) that failures in the field to read or understand error codes are attributable to CE practice -- rather than to a failure of cable operators and their vendors to document or even understand the error codes utilized in their own systems; and (5) that systemic authorization, billing, training, and data failures can somehow be blamed on consumer electronics devices.

using CableCARDs, as well as to correct and respond to a number of important misstatements and mischaracterizations that appeared in the June 29 NCTA rejoinder.

In this brief response, CEA demonstrates the ways in which the NCTA commentary is either inapposite, misleading, or both, and affirms the necessity of a regime of CableCARD common reliance. This response also includes an Appendix in which those CEA member companies that chose to provide further comments or information at this time discuss the nature of the problems encountered, why the information in the NCTA response is incorrect, incomplete, or inapposite, and make constructive suggestions on ways forward.

(1) Cable MSOs And Their Vendors Have Refused To Provide Adequate Testing Regimes, Implements, And Support, And Instead Blame "Self-Verification" By Manufacturers. *Under A Regime Of Common Reliance, MSOs Would Never Tolerate This Lack Of Adequate Support For Devices They Themselves Supply.*

Despite the requirement in 47 C.F.R. § 1204(a)(1) that MSOs provide CableCARDS by July 1, 2000, and NCTA's prior claims of compliance, the fact is that stable and tested CableCARDS were not available for the first verification wave for CableCARD-reliant competitive products, in February, 2004. The CableCARDS used for that verification wave were subject to hasty software patching and were not certified as being "in spec."

- *Hence*, from the beginning, under controlled conditions at CableLabs, it was necessary for CE manufacturers to try to accommodate *variations from specifications* rather than build to clear ones.

- Thus, from the beginning, CE manufacturers have been shooting at a target that, *to this day*, continues to move.

- A device adjustment made to suit one CableCARD firmware implementation can make a device less likely to work with another.

- This explains why (1) a CableCARD that does not work with one CE product might work with another, (2) causing the MSO field technician to conclude, erroneously that the first CE product is "defective" – even though *it* might work with another CableCARD that would not work in the second CE product.

- The various states of firmware upgrade among the CableCARDS themselves, which are unlabeled and *unknown* to MSO field technicians, explains why, as the NCTA letter concedes, field technicians arrive in homes with a bag of CableCARDS and try several in the hope that one will work. NCTA's March 30 filing acknowledged that, in multiple cases, "swapping CableCARD resolved problem."

- In anticipation of such problems, CEA requested of NCTA and CableLabs that a *systematic, joint field testing* program be implemented prior to the time that Digital Cable Ready devices were expected to come to market. NCTA and CableLabs *declined* to participate in any such program.

- Hence, the only way manufacturers could attempt to field test their products was to ask the cooperation of local MSOs on an *ad hoc* basis, and for employees who happened to be subscribers to request activation for early production samples, in their capacities as consumers.

- Not only did CableLabs and NCTA decline to cooperate in organized or *ad hoc* field testing, in its June 29 letter NCTA *complains* that a [Sony] engineer requested a CableCARD installation to do a personal field test of a product that had not yet been verified.

- Moreover, this one instance of an activity that CableLabs and NCTA made necessary by their own disinterest in field testing of CableCARDS apparently is the basis for a more general complaint that manufacturers have been "distributing" unverified products!

- NCTA then builds on this complaint to complain about self-verification in general – even though many or most of the claims of "defective" products in the NCTA letter are old, and relate to products that passed verification *at CableLabs* under the conditions described above.

(2) "Firmware Upgrades" Have Been More Necessary, And Prevalent, In MSO Vendor Systems And Devices Than In CE Devices; Upgrades In CE Devices Have Occurred In Response To Known MSO Or Vendor System Flaws. While All Systems And Devices Benefit From Upgrades, *Common Reliance Would Have Made "Getting It Right" The First Time A Much Higher Priority For MSOs And Their Vendors*.

NCTA points to the fact that many or most CE products have received firmware upgrades from their manufacturers, and that in some cases the upgrade "cured" problems of CableCARD reliance. NCTA concludes from this that the products were defective because (1) an upgrade was found to be appropriate, and (2) the upgrade "cured" the CableCARD interoperability problem. Neither conclusion is remotely valid.

- CEA is aware of a *three page*, single space list of firmware upgrades to CableCARDS and their support systems that have been implemented by a ***major CableCARD vendor***. In each case, the problem necessitating the upgrade is listed. CEA is also aware of subsequent firmware upgrades, not on this list, that the vendor has implemented.

    - If the necessity of an upgrade is evidence that a product is deficient, then CableCARDS remain deficient and MSOs have never achieved compliance with Section 1204(a)(1). This premise, advanced by NCTA, however, is not necessarily valid.

    - The constant firmware upgrading of systems and CableCARDS helps to explain the variations among devices that have been noted by NCTA field technicians. It also explains the cases noted, by NCTA as well as CEA, that some CableCARD-reliant devices initially work on an MSO system, stop working, ***and then start***

working again – all without any adjustment to the device. Manufacturers continue to be advised by consumers of such occurrences.

- Some MSOs' practices in downloading firmware upgrades to CableCARDS have *themselves* been responsible for a *known issue* that CE manufacturers and cable representatives are currently working to resolve: the download process "times out" before it is finished and restarts, throwing the product into a perpetual "blue screen" and making it inoperable with that, or in some cases, any, CableCARD.

- The variations in firmware upgrade status among individual CableCARDS helps explain why one CableCARD will work with one CE device yet not another, and vice versa.

- To the extent manufacturers intervene in their own product in the field by installing their own firmware upgrade, often this is a ***workaround*** of a known cable problem, not of a device issue.

(3) The Practice Of Cable Operators' Field Technicians In Experimenting With A Handful Of Cablecards In Consumers' Homes Illustrates The Flaws In The CableCARDS Themselves, And The Lack Of MSO Recordkeeping As To The Upgrade Status Of Their Own CableCARDS. *Under A Regime Of Common Reliance, MSOs Would Never Tolerate Such Loose Practices With Respect To Support Of Devices They Themselves Supply.*

In light of the information set forth above, it seems remarkable that MSO field technicians generally, as NCTA relates, arrive at homes with a bag of CableCARDS, and try, through ***trial and error***, to find one that will work with the consumer's device.

- If firmware upgrades are evidence of improvement, then MSOs should install *only* CableCARDS that are known to already have the latest upgrades downloaded to them.

- At a minimum, MSO field technicians should be *aware* of the upgrade status of the cards they bring to consumers' homes. However, it is CEA's understanding that MSOs do not keep track of such information, or at least they do not make field technicians aware of it. Nor, we believe, is there any systematic way in which CableCARDS are distributed to the field technicians. ***After several years, the operational rule still appears to be trial and error.***

- NCTA claims that the practice of bringing a handful of cards to installations was "requested" by CE manufacturers. If such a request were ever made, it would have been only as a last resort, given the factors and experiences cited above. Manufacturers' preference would be that, instead, ***CableCARDS be uniform in their status and reliability***.

(4) Failures In Reading Error Codes Or In Understanding Vendor Systems Are Attributable To A Failure Of Cable Operators And Their Vendors To Supply Adequate Information To Manufacturers, Or To Document Or Even Understand The Error Codes Utilized In Their Own Systems. *Under A Regime Of Common Reliance, MSOs Would Never Tolerate Such Loose Practices With Respect To Support Of Devices They Themselves Supply*.

It is remarkable that NCTA raises the subject of "error codes" and system information as a failing of CE manufacturers. Manufacturers' employees generally are more aware of these codes than are cable field technicians, yet have been frustrated in their efforts. More generally, CableLabs, MSOs, and their vendors have failed to share or provide necessary information and documentation.

- Some CE manufacturers have purchased entire headends from MSO vendors, for their own use in product development and testing. Yet, with respect to CableCARDS and their support, the information and documentation provided with these expensive systems has been sparse and inadequate.

- Some of the manufacturers cited for "failures" due to self-verification actually bring their products to CableLabs for informal testing at their own expense.

- MSO vendors on occasion do not share adequate information as to CableCARD problems with the MSOs that deploy the CableCARDS, leaving them in the dark and inclined to blame CE host devices.

    - In at least one case it was necessary for someone at CableLabs to inquire to the vendor as to the meaning of an error code, because neither the MSO, CableLabs, nor the CE manufacturer had ever been informed of the code's meaning. Once the manufacturer obtained this information it was able to address the problem encountered.

    - A March 30 filing by NCTA cites several field examples of "161-xx" error codes and attributes them to CE devices. A CE manufacturer has fielded inquiries from MSO technicians, inquiring as to the meaning of this code. The meaning is set forth in SCTE 28, Appendix E: "Failure mechanism = POD" (CableCARD)

    - CableLabs has taken the position that it is not responsible for training MSO field personnel.

- Most CE vendors were, until recently, not aware of the existence of a field manual authored on behalf of a cable system vendor.

(5) NCTA Admits That Some Problems Have Been Systemic And Have Been Simply Irrelevant To The Device. *Under A Regime Of Common Reliance, Authorization And Billing Systems For CableCARD-Reliant Devices Would Have Been Implemented And Thoroughly Tested Before These Devices Came To Market*.

Even if NCTA's attempts to point the finger back at CE devices were valid, NCTA does not and cannot deny that systemic problems have existed from the beginning, and remain, owing to the *ad hoc* nature of CableCARD support.

- NCTA does not quarrel with the fact that authorization and billing errors are generic and device-independent.

- Most MSOs employ different "channel maps" for their relatively few CableCARDS than they use for their set-top boxes – a known source of errors in the field.

- Some MSOs routinely strip "PSIP" information essential to the program guides in Digital Cable Ready products. ***Not only is this a clear violation of Commission regulations; it also disables parental, as well as viewer, control***.

* * *

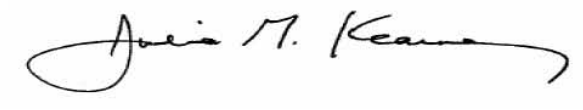
In filing this rejoinder to NCTA's claims and assertions, CEA and its members want to make clear that they do not deny, and do appreciate, the good faith and in some cases extraordinary efforts of some in the cable industry – its vendors, MSOs, and CableLabs – to make devices work under the present *ad hoc*, trial and error system of support for CableCARD-reliant devices. ***It is, primarily, the system that is broken.***

From the beginning, CEA has argued to the Commission that unless MSOs have a marketplace incentive, via common reliance, to assign an equal priority to CableCARD-reliant products, the acceptability of competitive entrant products to consumers, retailers, and manufacturers will be impaired. CE manufacturers, with decades of experience in building some of the world's most reliable and efficient products, have had every incentive to make Digital Cable Ready products a success -- so as to recover their investment in them, and minimize their costs of supporting these products in the field.

The notion that *every* CE manufacturer, in one of the world's most competitive markets, has been negligent and has acted against its own commercial interests, is not logical. What *is* logical, and makes sense, is that MSOs, which NCTA ***admits*** have developed a negative commercial interest in supporting the present generation of competitive entrant products, would set up their testing, support, and training systems in accordance with their own commercial interests. It was in recognition of this possibility that the Commission ordered common reliance in the first place.

The Commission recognized all of these factors in its March 17, 2005 Report & Order, in which it declined to abandon the principle of common reliance. It should continue to do so in dealing with the waiver requests it has received to date, which essentially make the same plea. Competitive entrants, and the consuming public that stands to benefit from competition, should finally receive its benefits as of July 1, 2007.

Respectfully submitted,



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APPENDIX A

Hitachi Home Electronics (America), Inc.

Introduction

Hitachi Home Electronics (America), Inc. believes the comments it offers below in response to NCTA's June 29 filing will be useful to the FCC's understanding of the challenges Hitachi faces as it strives to maximize the value of consumers' investments in UDCR products and the user experience when attempting to access cable services using those products.

Hitachi hopes its comments enhance all parties' recognition of the obstacles encountered to date and facilitates discussion about the mechanisms available to overcome those obstacles.

Hitachi's Comments:

1. Stepping Up To The Plate

Hitachi agrees with the following NCTA comment:

> "Both the CE and cable industries need to step up to the plate, acknowledge that each industry has responsibilities for making UDCPs work properly with CableCARDs and that neither industry can shirk its responsibility nor blame the other for all of the problems that may arise with UDCPs."

In response to this statement, however, Hitachi wants to focus on answering the following questions:

A. *What are CE and cable going to do to "step up to the plate?"*

B. *How will this solution achieve a level of reliability that will be acceptable to consumers? (e.g., analog cable service that can be dependably received by consumers without a set-top box)*

One positive step forward might be a joint "roundtable discussion" hosted by FCC representatives to frankly address these questions for the benefit of our mutual consumers.

2. Test Regimes For Both Cable and CE

In its June 29 filing, NCTA also suggested "a more stringent testing regime be established for UDCPs and successor host devices."

UDCR products currently adhere to a very specific and robust testing regime (*i.e.*, PICS and ATP). Again, NCTA's statement raises a very important question for Hitachi:

Is there any equivalent or comparable testing regime for cable head-end configuration and operation?

Without such a testing regime, CE manufacturers cannot be sure that head-ends in the field are configured to properly support CableCARDs and UDCR customers.

3. Feedback Should Be Improved – in both directions

NCTA's filing also noted that Cable receives minimal feedback from CE companies on known issues affecting CE host devices. At the same time, CE companies receive only minimal information on known issues affecting Cable head-ends or CableCARD hardware and software.

Hitachi believes this is another example of a worthwhile topic for discussion at a roundtable forum hosted by the FCC.

4. CableCARD Error Codes

(a) NCTA's filing referred to an issue encountered with Hitachi televisions, in which the CableCARD reported a "1090 error upon initialization with the host." Hitachi's records show that this issue arose in the field on five occasions, but following Hitachi's countermeasure in October 2004, it has not reappeared.

Interestingly, this "1090 error code" issue merits the FCC's attention because that error code did not appear in any UDCR Plug-and-Play specification or other documents provided to CE manufacturers.

Ultimately, it was necessary to contact CableLabs to interpret the 1090 error code. CableLabs, in turn, had to contact the CableCARD manufacturer, who provided a definition for that code. Once Hitachi received this information, it implemented a countermeasure.

By including system error codes in the Plug-and-Play specifications and documents provided to CE companies and MSOs, it would enable both Cable and CE companies to more readily address consumer service issues.

(b) NCTA's March 30 filing referred to many cases of "161-*xx*" error codes reported in the field. Although MSOs attributed all these error codes to HOST defects, the SCTE 28 2004 HOST-POD Interface Standard identifies each of them as POD defects.

Hitachi's concern is that this confusion represents a serious impediment to consistent diagnosis and resolution of consumer service issues by Cable and/or CE technicians.

5. Head-End CableCARD Documentation

It is worth noting that, when Hitachi has purchased head-end equipment for UDCR development and testing, it received no meaningful CableCARD-related setup, installation, troubleshooting or maintenance documentation or in-person training.

If this type of information is not being provided to Cable MSOs when they order and install head-end equipment, they may not be positioned to work effectively with consumers and CE companies to resolve important service issues.

Conclusion

After more than two years of deployments, Cable and CE companies continue to disagree on how to ensure consumers have reliable access to cable services via CableCARD-equipped UDCRs.

Hitachi believes that consumers would benefit if Cable and CE companies engage in constructive dialog regarding the points above. One suggestion Hitachi offered above is to convene a "roundtable discussion" (or a perhaps a series of such events) hosted by FCC representatives.

As Hitachi has noted, a critical component of any such discussions should be the fact that while CE companies are held to a "common reliance" yardstick—PICS and ATP, there appears to be no such testing regime for cable head-end configuration and operation. It is worth studying the benefits that consumers, MSOs and CE companies alike would realize if an equivalent or comparable testing regime did exist for cable head-end configuration and operation.

In addition, Hitachi continues to believe that the most dependable method of ensuring consumers can reliably access cable services via CableCARD-equipped UDCRs is for both Cable and CE companies to adhere to a true, system-wide "common reliance" standard for all devices.

Comments of Toshiba

Toshiba Response to Charter

"CHARTER AZ": This was a typographical mistake. The location was Charter in New Mexico. The original report states, "We sent the TV a cold initialization signal." The report should state, "Charter sent the TV a cold initialization signal," since Toshiba has no way to authorize a CableCARD device. Additionally, the original call record states, "… billing information changed and then got a 1090 error. Charter/Toshiba called HITS and they had Charter activate card and it worked." This is just an example of the numerous billing and authorization problems that have happened and continue to happen in the field.

Charter's response to CEA's March 23 Notice of Exparte Presentation incorrectly states: "Toshiba was able to solve the TV problem by hitting the TV with an initialization signal that is not available from a cable headend." Toshiba does not have this ability. Only the Cable Company Operator is able to authorize and de-authorize CableCARD devices.

Toshiba Response to Comcast

Toshiba Host Devices: Toshiba did have an issue with a particular local broadcast station during prime time in one geographic location. This issue was quickly fixed, once reported. However, the total number of customers affected by this issue was very small (approx 6 Customers).

Our Technical Support continues to have difficulty reaching the head end personnel of some Comcast locations. Once our customer support person is able to get to the correct person in the head end operation center the problem gets resolved. However, many times our customer service rep has spent 30-40 minutes on the phone to get access to these personnel. We have documentation of the limited resources of these head end centers to provide access to our customer service rep. They have limited staff and the CE companies do not usually have direct access to the head end personnel. Unfortunately, some of the problems with the CableCARD authorization can only be solved by these personnel.

Toshiba Response to Cox Communications

Kansas and Toshiba: The source of the problem did relate to conditional access ("CA") state. It should be noted that this is not the CA state of the DCR TV as stated by Cox, but is in fact the CA state of the CableCARD. If some part of the authorization process is not properly completed, then the CA state of the CableCARD will not show the "connected" message. The "connected" message is an indication that the CableCARD can decrypt the current program. Toshiba continues to work with customers in this area to get the CableCARDs authorized and the Host Device working to the customer's expectation. However, unless the root causes of these problems are determined, then neither Toshiba nor the Cable Companies can fully claim that the problem exists in any part of the cable network, CableCARD, or Host device. In fact, Cox at some locations does not seem to have a

procedure in place, or does not use it, to properly de-authorize previously used CableCARDs. If one of these cards is reused then it does not properly authorize in another Host device.

Toshiba is still investigating the channel tiling issues and audio problems. We currently believe it is an incompatibility that is caused by a certain brand of head end equipment and the tuner/demodulation chip used in Toshiba and some other brands of televisions. Approximately three Cox Systems that have this same brand of head end equipment have similar issues. It is unknown currently which item is out of specification.

Toshiba Responses to Time Warner Cable

Toshiba – Kansas City, MO: Toshiba's reports regarding Time Warner in Kansas related to a problem in acquiring the channel map. We initially scheduled to update the software, but by the time the software was scheduled to be updated, the televisions were already receiving a channel map. This must have been related to some change on the Cable Company side. However, we still performed the software update to prevent any future problems in this area. It is still our assertion that the channel map was not initially acquired due to some issue in the authorization/routing of the messages to the CableCard.

Comments Of TTE Technology, Inc.

"Appendix A"

Adelphia (page A-1): Adelphia's response can be summarized as "Mistakes happen, and we're admitting that we make them." That's all we ask. Cable's representation to the FCC is that the bulk of the problems are due to TVs. We want them to admit that they have their share of the problems and work to correct them in the future.

Bright House (page A-2): BHN states *"BHN Indianapolis had over 450 CableCard customers by July 2005 and none of them were experiencing or reporting the "Session Layer Lockup" problem described by TTE."* BHN Indianapolis operators, on several occasions, verbally informed customers, who happened to be TTE employees with certified UDCR TVs in their homes, that the loss of all encrypted channels was a known problem. BHN Indianapolis engineers also acknowledged this. This is the same problem as the SA CableCard "Session Layer Lockup" problem, otherwise known as the "Transport ID (TS_ID) = 0" issue. To recover the encrypted channels, the BHN operators informed customers to manually remove the CableCard and reinsert it, or cycle the power to the TV (which, in turn, forces a reset of the CableCard).

See further references below in this letter where Time Warner and CableLabs acknowledge this SA CableCARD issue.

SA attempted to fix this issue with a new CableCARD software patch release, version 1.49p1, in July 2005. In order to help verify this new SA software release, TTE asked BHN Indianapolis to remotely upgrade a few select CableCARDs installed in TTE TVs, to which BHN agreed. Unfortunately, BHN Indianapolis was unable to perform these individual CableCARD upgrades. While we greatly appreciate BHN's efforts to help TTE and SA diagnose and test the SA fix, TTE never asked Bright House to distribute the software patch to their entire network, as BHN claims in their response. BHN Indianapolis was never able to make the select CableCARD software upgrades happen through the cable system, so they upgraded two cards at their office and sent them to us on September 30, 2005. Upon connecting the two cards to the cable system, one of them was immediately down-graded to the existing field release leaving us one sample for testing.

In January through March 2006, BHN Indianapolis attempted to remotely upgrade another 10 CableCards to the 1.49p1 software. Unfortunately, none of these 10 cards were upgraded successfully either. Finally, in May 2006 BHN Indianapolis made the 1.49p1 software the default software for their entire system, at which point the cards were successfully upgraded in the field to this new release. Thus, it appears that BHN has issues targeting specific CableCARDs with unique software upgrades in the field.

The TTE products used for this CableCARD software upgrade testing have been verified in numerous instances to properly support the CableCARD upgrade procedures, including at CableLabs by CableLabs personnel during certification, many instances by TTE engineers

during testing and self-certification at CableLabs and elsewhere, as well as on the BHN Indianapolis system when the full cable system is defaulted to a particular software version. In addition, a BHN Indianapolis engineer admitted having issues with targeted CableCARD upgrades during investigations into this issue.

Charter, Godfrey, IL (page A-4) : Charter claims that a QAM channel will not be "noisy" – it will be present or not. This overlooks macroblocking and video freezes that occur when a QAM signal is operating either at or outside of its lower signal strength limit. Just because a STB can obtain a lock on a signal does not mean that the signal is within required limits.

Time Warner, "TTE Technology – Syracuse, NY" (page A-15): Once again, this is the infamous SA "Session Layer Lockup", or "Transport ID (TS_ID) = 0" issue, which causes all encrypted channels to become non-viewable and the CableCARD to be non-responsive until it is reset either manually or by the Host. In their response, Time Warner admits that SA determined the problem was with their CableCARD, but they attempt to confuse the issue by stating TTE claimed the symptom of the problem was the actual cause. TTE made no such claim. In fact, it's believed the split channels and channel map changes which Time Warner refers to is, at least, related to the root cause of this SA CableCARD problem. By removing the split channels, Time Warner Syracuse simply worked around the problem.

Although Time Warner claims that the SA software patch solved the problem in Syracuse, TTE continues to document to both CableLabs and SA on an ongoing basis since October 2005 that the problem still exists on other cable systems running this patch software (version 1.49p1). As an example, see references above to Bright House Networks, Indianapolis, which has no split channels. To date, we have received no response from SA for further investigation of this issue.

Time Warner also further admits that this is an ongoing issue in the NCTA-MSO CableCARD Status Report dated 6/26/06. In this report, reference "Time Warner Cable FCC CableCARD Status Report" on pages 25 – 26, third problem noted:

> "Problem: On certain Hosts devices, all digital services go black a few days after installing a CableCARD.
> Resolution: This issue has been tracked to a HOST TC ID = 0 fault that requires the customer to reset the CableCARD before digital services are restored."

In fact, this is not a "HOST TC ID = 0" fault, but rather the SA CableCARD "Session Layer Lockup" or "TS_ID = 0" issue. If it were a Host problem, then resetting the CableCARD would not resolve the issue. In addition, this SA CableCard issue has been repeated on every TV brand tested on the original Time Warner, Syracuse, NY and Bright House Networks, Indianapolis, IN cable systems.

SA, Time Warner and CableLabs were originally notified of this SA CableCARD problem in November, 2004. This issue still continues to date, 1 year and 8 months later, with no resolution. If "common reliance" existed, where SA and the cable MSOs had to utilize

CableCARDs in their set top boxes (i.e. where they had to "care" about support of CableCARDs), then this issue would have been resolved long ago. SA likely would have found the issue during their own internal CableCARD-reliant set top box testing, prior to the issue ever making it into production CableCARDs.

"Appendix B" – CableLabs reported "UDCP Issues List" (page B-8)

Line item 36:

"Vendor: RCA
Description: Encrypted channel go dark after < one to 3 days. Cannot access CableCARD info.
Date: 1/4/2005
Status: RCA and SA are investigating. Problem duplicates in CableLabs. 3-22-05: Problem resolved by RCA."

TTE Response: This is the SA CableCARD "Session Layer Lockup" or "TS_ID=0" issue as referenced above with Time Warner and Bright House Networks. As stated above, SA has acknowledged this to be a problem in their CableCARD, even though they still have not fully resolved it. CableLabs has this listed as an RCA problem that was resolved by RCA, but this is not the case. TTE did implement a work-around for this SA issue for future host TV software releases by detecting that the SA CableCard has locked up, resulting in the loss of all encrypted channels, and automatically resetting the CableCard to restore encrypted channels. However, even with this Host work-around, the consumer will still loose all encrypted channels on occasion for several minutes at a time.

CableLabs should reassign this line item to SA.

Line item 37

"Vendor: RCA
Description: Cannot view encrypted content. ECM not being received at CC CableCARD Diag Screen. CP Auth msg and channel map present on DTV.
Date: 3/10/2005
Status: Two CableCARDs have been tried. STB works in the home. Levels appear to be OK. Once of the two CableCARDs was verified OK in another set. Issue appears to be with DTV."

TTE Response: Insufficient information was provided to determine the root cause of the problem. Cable accuses CE manufacturers of providing anecdotal evidence that is insignificant, but we are charged with a problem based on similar anecdotal evidence. Based on our field experience with problem CableCARDs and trouble with head end authorization and billing systems, there is not enough information here to definitively assign this item to the TV.